Youth Decision Survey

Summary Report

September 2000

NOVA SCOTIA

Department of Education

Provincial Apprenticeship Board

Acknowledgment

The 'Youth Decision Survey' initiative was conceived by the collective effort of Nova Scotia Provincial Apprenticeship Board members. Survey design was a rather simple matter given the assistance and permission to use a 1988 survey conducted by Dr. John Walsh of the University of Guelph. Without Dr. Walsh's assistance, we may still be in the survey design phase. Provincial Apprenticeship Board staff were the delivery vehicle, as well, the means by which all 175,000 pieces of data were entered. The whole project would not have been possible without the permission and subsequent assistance provided by each School Board, the participating school Principal, Teacher, and the students. To all, a great deal of thanks.

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Chair
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Executive Summary

There is no denying that certain forces/trends/conditions are impacting our Country's ability to meet human resource demand in the trades sector. Sector reports and news articles have been sounding alarms of skilled trades shortages for some time now.

In a March 6, 2000 article of the Globe and Mail titled "***A building problem for business***" it was reported that "across the country, employers, unions, governments and other groups are sounding alarm bells about the imminent retirement of large numbers of older tradespeople. That, combined with the boom in building, oil exploration and other economic activity across Canada, is expected to lead to severe labour shortages in the near future."

In a recent article of the Daily News (October 8, 2000), Stephen Bornais reports "Nova Scotia desperately needs tradespeople." In the article, Larry Leblanc, vice-president of East Coast Operations of PanCanadian, tells delegates of the recent Nova Scotia Oil and Gas Conference, "there's a lot of work ahead of us, and not that many people to accomplish that work."

In a recent study prepared by the Atlantic Provinces Economic Council (APEC), it was reported that "future demand for construction work and workers is entering a period of sustained growth in Nova Scotia and Atlantic Canada. In Nova Scotia, the majority of these projects are related to the establishment of the natural gas industry in the province."

In a June 2000 presentation to the Provincial Apprenticeship Board, Graham Conrad, Executive Director of the Nova Scotia Automotive Human Resource Sector Council, indicated that "there is now a shortage of skilled technicians within the labor force right across Canada. Within the next 5-7 years, an estimated 14% of the existing labor force is expected to be leaving the trade."

In a 1999-2001 Management Issues Survey report by the Alliance of Manufacturer's and Exporters of Canada, 23% of the companies surveyed reported that technical skills are in need of improvement; 39% of the companies reported a shortage in machining personnel; 32% reported a shortage in Tool & Die personnel; 28% reported a shortage in Other Mechanical Skills personnel; and 22% reported a shortage of welders.

To attempt to understand the evident skilled labour shortages, the Nova Scotia Provincial Apprenticeship Board adopted (in the Fall of 1999) one of a number of initiatives that was to determine the level of apprenticeship based knowledge of high school students across the province and factors leading to their post-secondary decisions. The Board decided on a modified version of a survey implemented by the University of Guelph in 1989. With a survey in hand, Board staff then sought permission to implement from each of the six School Boards across the province. All School Boards granted permission and in each case, Board staff contacted the randomly selected schools in each School Board jurisdiction. By the middle of April, 2000, 1276 students from 15 High Schools had completed the Youth Decision Survey.

To a great extent, most of what we observed in analyzing the results is not much different than what was already known or suspected. We found that:

most students (greater than 80%) believe their parents would like to see them go to University or Community College after leaving high school. Very few (1.5%) thought their parents would like to see them become an apprentice / tradesperson;

students find the advice of Teachers and Guidance Counsellors and family more useful than any other information sources in helping decide what they do when they leave school;

students have learned about apprenticeship more from family and class discussions than any other source; and

students consider 'personal likes / dislikes' and 'secure future' as important issues when considering what they are to do after leaving high school. 'Decisions of friends' and 'Teacher's / Guidance Counsellor's opinion' were considered the least important issues.

It also appears that 'we' haven't been very effective in creating apprenticeship awareness. We found that:

students have some awareness of Skilled Trades opportunities and tend to have positive perceptions of Skilled Trades but, appear to have limited knowledge of Apprenticeship and the relationship between Apprenticeship and Skilled Trades;

it's more likely that once their education is complete, students (based on their perceptions) are more likely to work in the fields of Entertainment, Education and Personal / Public and Business Services than in the fields of Agriculture, Energy, Forestry, Manufacturing and Processing, Pharmaceuticals, Telecommunications and Trades and Construction;

students know much more about jobs in the Entertainment field than jobs in Trades and Construction; and

our high school students consider themselves strongest in the subjects English and Communication and weakest in Mechanical Skill.

Background

The Provincial Apprenticeship Board (PAB) is responsible for providing advice to the Minister of Education on matters concerning apprenticeship training and is considered to be a fundamental link between government, business and industry. Specifically, it is responsible for recommending the designation of new trades / occupations in Nova Scotia and plays a key role in promoting and educating the public about apprenticeship.

In the Fall of 1999 the PAB adopted a number of initiatives which were designed to assist the Board in fulfilling its mandate. One of the identified initiatives was to determine apprenticeship based knowledge of high school students across the province. In addition, Board members wanted some indication of the factors leading to the students' choice of post-secondary education. To this end, the Board delegated the initiative to the Marketing and Communications subcommittee. The committee met on several occasions to discuss format and scheduling of the initiative. By the middle of Fall 1999 the committee had decided on a modified version of a survey (attached) implemented by the University of Guelph in 1989. The Guelph study surveyed students, parents, apprentices, journeypersons and employers. It was felt the scope of the Guelph study was too large but the student component was thought to fit well with the Board's objective.

Permission to use the survey was granted by Dr. John Walsh of the University of Guelph. Board staff carried out modifications of the Guelph survey and added additional questions. With a survey in hand, Board staff then sought permission to implement from each of the six School Boards across the province. All School Boards granted permission and in each case, Board staff contacted randomly selected schools in each School Board jurisdiction.

Methodology

The survey was delivered by Provincial Apprenticeship Board staff in each of the 15 participating schools. The selection of individual classes was the responsibility of the school Principal with the only parameters being: at least one class for each grade (10, 11 and 12); each class would contain a good cross-section of students (sex, academic ability) and; one of the classes be a Career and Life Management course. During each survey session, students were allowed to ask questions but were not given explanations that would lead the student to a specific response. The schools were surveyed beginning in December 1999 and completed in April 2000.

Data was inputted over a ten week period using SPSS version 9. SPSS allowed for the data to be summarized and analyzed with relative ease. All tables and charts in this document were generated using SPSS printouts.

Survey Results

1276 students from fifteen high schools (six School Board districts) across Nova Scotia participated in the Youth Decision Survey study ***(Table 1)***. 644 of the respondents were males and 630 were females ***(Table 2)***. The grade level distribution was - 33.9% Grade 10, 36.6% Grade 11 and, 29.5% Grade 12 ***(Table 3)***.

Table 1

Breakdown of Respondents by School Board

School Board	***Frequency***	***Percentage***
Annapolis Valley	246	19.3
Cape Breton Victoria	222	17.4
Chignecto	156	12.2
Halifax	311	24.4
South West	178	13.9
Strait	163	12.8
Total	**1276**	100.0

Table 2

Breakdown of Respondents by Sex

Sex	***Frequency***	***Percentage***
Male	644	50.5
Female	630	49.5
Total	**1274**	100.0

Table 3

Breakdown of Respondents by Grade Level

Grade Level	***Frequency***	***Percentage***
Grade 10	432	33.9
Grade 11	467	36.6
Grade 12	377	29.5
Total	**1276**	100.0

When asked about strengths in various areas, students rated themselves strongest in Communication and English and weakest in Mechanical Skill ***(Table 4)***.

Table 4

How strong are you in each of the following areas?

1= Not Very Strong
5 = Very Strong

Information / Advice	**1** (%)	**2** (%)	**3** (%)	**4** (%)	**5** (%)
Mathematics	8.6	16.1	35.7	28.7	10.8
Science	4.1	12.5	38.0	35.2	10.1
English	1.6	10.9	28.6	38.8	20.1
Communication	1.4	6.2	29.2	37.9	25.3
Technology	3.3	14.8	35.9	32.9	12.1
Business	4.8	16.9	43.5	25.7	9.1
Art / Music	8.7	17.0	22.4	25.4	26.4
Social Science	3.8	14.2	41.5	29.4	11.0
Computer Studies	5.1	13.6	32.9	32.2	16.2
Mechanical Skill	13.9	23.8	29.9	20.5	11.9

When asked about job knowledge, greater than 50 % of the respondents indicated little to very little knowledge in the areas of Energy, Forestry, Logistics, Manufacturing / Processing, Pharmaceuticals, Telecommunications and Trades / Construction ***(Table 5)***.

Table 5

How much do you know about jobs in each of the following areas?

1 = Very Little
5 = A Great Deal

Job Areas	**1** (%)	**2** (%)	**3** (%)	**4** (%)	**5** (%)
Agriculture	18.4	28.5	31.8	14.5	6.8
Business Services	14.6	31.6	35.3	14.9	3.6
Education	5.7	17.9	37.3	30.3	8.7
Energy	31.5	33.0	24.2	7.9	3.5
Entertainment	5.0	13.3	27.4	30.1	24.3
Environment	10.7	29.7	40.1	16.2	3.2
Fine Arts and Crafts	13.6	24.5	29.5	20.0	12.4
Forestry and Paper Products	25.0	33.2	24.5	12.7	4.5
Health	12.0	27.0	34.4	19.4	7.3

Job Areas	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
Information Technology	22.7	27.5	26.4	15.5	7.9
Logistics	30.7	32.0	24.3	10.3	2.7
Manufacturing and Processing	23.3	36.4	25.5	11.5	3.3
Personal Services	9.7	19.9	28.2	25.9	16.2
Pharmaceuticals	25.4	31.2	28.1	11.9	3.4
Public / Community Services	11.8	26.3	31.1	22.3	8.5
Retail Services	9.6	22.7	32.6	23.8	11.3
Telecommunications	22.0	35.6	28.1	12.3	2.0
Tourism	11.0	24.7	33.8	20.8	9.7
Trades and Construction	**27.7**	**28.5**	**22.7**	**13.0**	**8.0**
Transportation	20.3	27.0	29.3	16.6	6.8

When asked to respond to "apprenticeship" based statements ***(Table 6)*** using a 5-point scale (1= strongly disagree, 3 = undecided/don't know and 5 = strongly agree), the following was observed :

* 83.7% either agreed, strongly agreed or indicated undecided / don't know to the statement "I do not know much about Apprenticeship Programs."
* Greater than 60% of the student respondents indicated undecided / don't know to the following statements:

Apprentices are paid low wages
Apprenticeship programs are too long
Apprenticeship programs are expensive
People in Skilled Trades are satisfied with their jobs
I know what I need to become and apprentice
There is big demand for Skilled trades people
People in Skilled Trades rarely get promoted
Skilled trades and apprenticeship information is available at school

Table 6

How much do you agree or disagree with the following statements?

1 = Strongly Disagree
3 = Undecided / Don't Know
5 = Strongly Agree

Statements	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
Apprentices are paid low wages.	6.3	11.8	**71.2**	6.5	4.2
An apprenticeship is too difficult for me.	23.1	18.3	**52.5**	3.5	2.6
Apprenticeship programs are too long.	10.1	14.7	**67.4**	5.2	2.6

Statements	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
Apprenticeship programs are expensive.	8.5	11.4	**72.1**	4.8	3.2
I will probably choose a job in a Skilled Trade.	20.3	10.9	**40.7**	15.1	13.0
Skilled Trade jobs are well paid.	2.8	7.2	**52.9**	26.1	11.0
Skilled Trade jobs are dirty.	21.5	19.2	**45.6**	9.0	4.7
Skilled Trade jobs are interesting & challenging.	3.4	5.7	**41.0**	33.6	16.4
People would think it unusual if I became an apprentice.	18.8	12.0	**52.3**	8.4	8.6
New technology makes Skilled Trades less important.	17.4	20.1	**44.5**	11.3	6.7
People employed in Skilled Trades are satisfied with their jobs.	3.6	8.0	**62.1**	19.7	6.5
Skilled Trades people are often unemployed.	10.5	18.4	**58.9**	8.3	3.9
An office job is better than a Skilled Trade job.	18.4	14.5	**49.2**	10.5	7.3
Skilled Trades people often start their own businesses.	2.5	6.6	**51.3**	28.9	10.8
Skilled Trade jobs are important in industry.	2.6	3.9	**39.8**	28.8	25.0
Women are capable of working in Skilled Trades.	4.3	3.4	**18.8**	15.7	57.8
I know what I need to study to become an apprentice.	13.8	8.5	**62.7**	8.7	6.3
There is a big demand for Skilled Trades people.	4.1	6.0	**62.7**	17.3	9.9
I have thought about becoming an apprentice.	26.9	13.3	**44.7**	9.6	5.5
Apprenticeship is not for me.	10.8	8.1	**56.7**	8.0	16.5
I do not know much about Apprenticeship Programs.	6.5	9.8	**29.2**	18.2	36.2
People in Skilled Trade jobs rarely get promoted.	8.3	13.1	**65.9**	7.7	5.0
I believe good students do not go into Skilled Trades.	25.7	17.0	**45.2**	7.1	5.0
Apprenticeship is an option for less academically inclined students.	17.9	11.9	**54.8**	9.3	6.1
Skilled trades & apprenticeship information is available at school.	6.8	6.7	**61.1**	14.0	11.4

When asked to respond YES or NO to "apprenticeship" based statements *(**Table 7**)*, the following resulted:

* 60.7% of the respondents indicated knowing what an apprentice is, whereas only 22.2% indicated knowing what a "journeyperson" is.
* 68.2% indicated having close family members in Skilled Trades.
* 82% agreed that people in Skilled Trades are successful and 90.4% indicated there are good opportunities in Skilled Trades.
* 63% indicated Grade 12 as a requirement to become an apprentice.
* 31.7% indicated the requirement to be employed to become an apprentice.
* 55.5 % indicated an apprenticeship is required to work in a Skilled Trade.
* 46.1 % indicated attending college as a requirement to work in a Skilled Trade.

Table 7

Answers to Apprenticeship Questions / Statements

Questions / Statements	YES (%)	NO (%)
Do you know what an 'apprentice' is?	60.7	39.3
Do you know what a 'journeyperson' is?	22.2	77.8
Do you have a part-time job?	50.9	49.1
Have you had a summer job?	75.5	24.5
Do you know what job you want when you leave school?	61.2	38.8
Most adults in my family have been to University.	44.6	55.4
Do you have close family members in Skilled Trades?	68.2	31.8
I rely on family members for advice on my education / career.	57.5	42.5
I rely on teachers / counsellors for advice on my education / career.	50.6	49.4
I rely on my friends for advice on my education / career.	37.1	62.9
I generally make my own decisions on my education / career.	88.5	11.5
I know people who are apprentices.	32.5	67.5
People who have jobs in Skilled Trades are successful.	82.0	18.0
You have to go to University to get a good job.	34.8	65.2
Grade 12 is required to become an apprentice.	63.0	37.0
You must be employed to become an apprentice.	31.7	68.3
An apprenticeship is required to work in a Skilled Trade.	55.5	44.5
Attending College is required to work in a Skilled Trade.	46.1	53.9
There are good job opportunities in Skilled Trades.	90.4	9.6
I expect to do the same kind of work as my friends.	8.4	91.6
Females are encouraged to pursue careers in Skilled Trades.	58.9	41.1
I have seen information on Skilled Trades & Apprenticeship at school.	33.0	67.0

When asked about the likelihood of working in various job areas once education is complete ***(Table 8)***, greater that 40% of the respondents indicated "not likely" for agriculture, energy, fine arts and crafts, forestry and paper products, manufacturing and processing, pharmaceuticals, telecommunications, trades / construction and transportation. Job areas receiving greater than 10% of responses as "very likely" were education, entertainment and health.

Table 8

How likely is it that you will work in the following areas when your education is complete?

1= Not Likely
3 = Undecided
5 = Very Likely

Areas	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
Agriculture	55.2	15.8	18.3	7.0	3.7
Business Services	21.5	18.7	29.7	21.1	9.1
Education	28.1	16.1	25.0	18.1	12.7
Energy	47.3	19.5	22.0	8.8	2.3
Entertainment	21.5	12.1	25.2	23.2	18.0
Environment	33.8	20.0	25.6	14.7	5.8
Fine arts and crafts	44.3	15.9	19.6	11.4	8.9
Forestry and paper products	55.1	18.8	15.8	7.6	2.7
Health	30.2	16.0	21.9	16.7	15.2
Information Technology	32.4	16.9	26.6	15.0	9.1
Manufacturing and Processing	44.0	21.2	23.6	8.7	2.6
Personal Services	27.4	19.1	28.0	16.9	8.6
Pharmaceuticals	44.1	17.4	22.8	10.2	5.6
Public / community services	28.2	16.0	27.4	19.4	9.0
Retail services	36.3	19.8	26.7	12.4	4.8
Telecommunications	40.7	20.0	24.4	11.7	3.2
Tourism	34.9	17.8	24.3	15.0	8.0
Trades and construction	44.8	16.5	19.7	11.2	7.7
Transportation	43.7	16.7	23.0	11.0	5.6

On a scale from 1 to 5, (1 being not useful and 5 useful), students rated teachers / guidance counsellors and family members as useful to very useful more than all other sources of information / advice when deciding what to do when leaving high school ***(Table 9)***. TV / radio / magazines and employer were rated the least useful as sources for information and advice.

Table 9

In helping you decide what to do when you leave high school, what sources of information and advice do you find to be the most useful?

1 = Not Useful
5 = Very Useful

Information / Advice	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
University / College Calendars	12.0	10.8	24.1	22.7	30.4
Friends	9.2	14.7	30.9	28.0	17.1
TV, Radio & Magazines	14.4	19.6	29.1	24.7	12.2
Internet	10.4	10.4	20.3	30.7	28.2
Family Members	5.6	7.8	19.9	35.7	31.0
Teachers and Guidance Counsellors	6.8	7.2	17.7	31.5	36.9
Career Fairs	11.4	10.9	25.0	25.9	26.7
Brochures / Posters	11.5	13.6	28.4	26.8	19.7
Employer	17.2	13.2	27.1	24.9	17.6
Other	16.9	8.9	30.6	18.7	24.9

When considering what to do after leaving high school ***(Table 10)***, greater than 74% of the students rated the issues of potential future income / earnings, secure future and personal likes and interests as a 4 or 5 (5 being very important). Decisions of friends and advice / opinions of friends were considered the least important issues.

Table 10

When considering what you will do after leaving high school, how important are the following issues?

1 = Not Important
5 = Very Important

Issues	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
Immediate Income / Earnings	6.1	6.5	25.8	28.1	33.5
Potential Future Income / Earnings	2.9	4.2	16.1	29.3	47.5
Location (ie. stay home vs. move away)	8.7	7.2	22.0	26.8	35.2
Decisions of Friends	25.1	19.3	31.7	14.3	9.6
Advice / Opinions of Friends	15.6	19.0	35.3	18.5	11.6
Advice / Opinions of Family	7.9	11.4	29.4	33.0	18.3
Teacher's / Guidance Counsellor's Opinion	17.8	17.3	30.1	22.8	12.0
Length of Commitment (ie. 2 vs. 4 year program)	15.1	14.0	26.5	22.1	22.3
Natural Skills / Aptitudes	5.2	5.2	23.9	31.2	34.6
Secure Future	3.7	4.2	17.4	26.4	48.3

Issues	1 (%)	2 (%)	3 (%)	4 (%)	5 (%)
Challenging Work	5.1	6.5	28.5	34.2	25.7
Personal Likes and Interests	2.3	2.3	10.7	22.3	62.4
Predictions of Future Job Market Conditions	6.3	6.3	29.0	27.9	30.5

In considering what the students felt their parents would most like to see them do when leaving high school ***(Table 11)***, 68.3% of those who responded chose the "go to university" option. 12.6% chose the "go to community college" and only 1.5% felt their parents would like them to become an apprentice / tradesperson.

Table 11

What do you think your parents would most like to see you do when you leave high school?

Options:	*Frequency*	*Percentage*
Go to University	848	68.3
Go to Community College	156	12.6
Go to Business School	21	1.7
Become an Apprentice (Tradesperson)	19	1.5
Get a Job	44	3.5
Do what makes me happy	41	3.3
Military	13	1.0
Other	36	2.9
Not Sure	64	5.2
Total	**1242**	100.0

When asked about learning anything about apprenticeship through various sources ***(Table 12)***, family was rated the highest with 39.4% of the students indicating YES to the question. The next highest source of information observed was class discussions / presentations (37.4%) followed by friends at 31.5%. Program calendar and newsletters were rated the lowest at 11.4% and 17.7%.

Table 12

Have you learned anything about apprenticeship through the following sources?

Sources	YES (%)	NO (%)
A Booth at Career Fairs	21.1	78.9
Program Calendar	11.4	88.6

Sources	YES (%)	NO (%)
Internet	23.7	76.3
Brochures / Posters	26.2	73.8
Newsletters	17.7	82.3
Class Discussions / Presentations	37.4	62.6
Family	39.4	60.6
Friends	31.5	68.5
TV / Radio & Magazines	30.9	69.1
Employer	19.2	80.8
Other	17.0	83.0

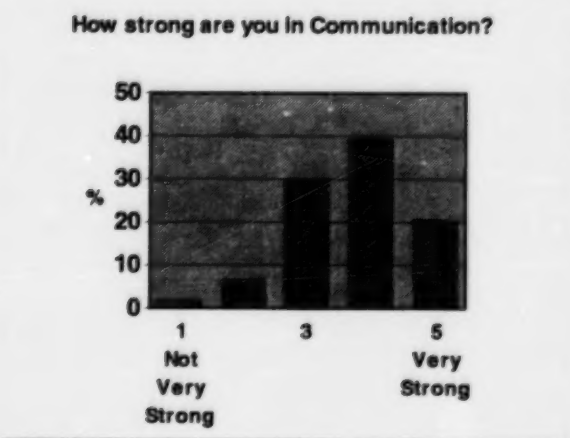
Skilled Trades and Apprenticeship Knowledge?

The preceding twelve tables provide some insight into the state of apprenticeship and trades knowledge of high school students across Nova Scotia. They do not, however, bring forward a clear understanding in their entirety. For this reason, the following section (analysis) attempts to provide a focused picture by selecting individual survey questions and presenting them in a manner in which inferences may be drawn. For each question presented, a bar chart has been used to represent the results.

As noted earlier, students rated themselves highest in Communication and lowest in Mechanical Skill when asked about their strength in various subject areas (***Table 4***).

Chart 1

63.2% of the students surveyed rated themselves strong to very strong in the area of Communication.

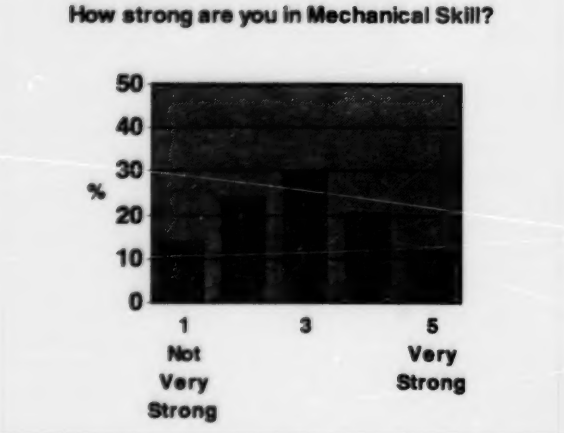


This is certainly a good thing. Strong communication skills are important if not vital in accessing job opportunities and moving through the occupational choices we make throughout our career.

Chart 2

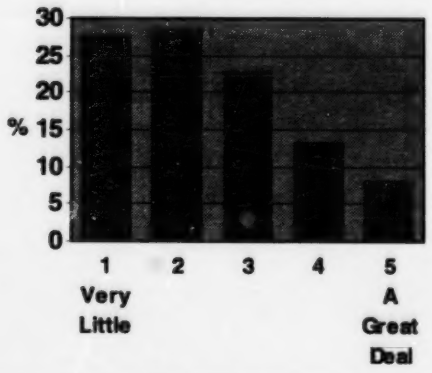
32.4% of the students surveyed rated themselves strong to very strong (rating of 4 or 5) in the area of Mechanical Skill.

It appears students may not understand the nature of "mechanical skill" or may have had little exposure to the subject area.



With the lowest strength rating in Mechanical Skill, it's not surprising that 56.2% of the students surveyed indicated knowing little to very little about jobs in Trades and Construction.

Chart 3



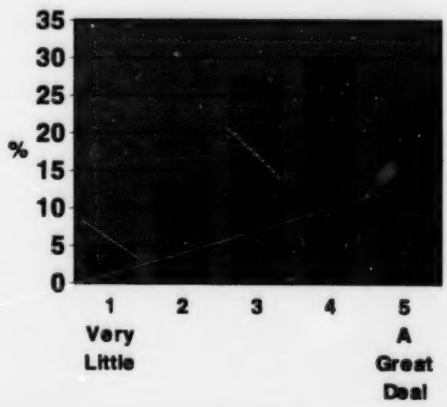
21% of the students surveyed indicated they knew a good to a great deal of knowledge about Trades and Construction jobs.

Only in two other of the 20 occupational categories listed (Energy and Logistics) did more students indicate knowing very little about those job areas.

Likewise, with stronger perceived strength in Communication, it's not surprising students indicated knowing most about jobs in the Entertainment field.

Chart 4

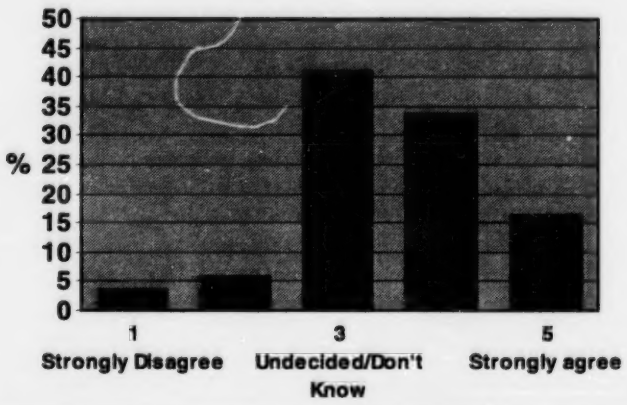
54.4 % of the students surveyed indicated having a good to a great deal of knowledge about jobs in entertainment.



Much of what students expose themselves to today influences their decisions of tomorrow. With television and other significant forces playing hard on the career decisions of our students, the challenge of bringing balance becomes even greater.

In Tables 6 and 7 presented in the last section, the one thing that jumps out from a cursory look at the results is an apparent lack of knowledge or understanding of Apprenticeship. With this lack of apprenticeship knowledge, it is also surprising that the students surveyed had somewhat positive perceptions about skilled trades. It appears (in general) students felt skilled trade jobs were interesting and challenging.

Chart 5



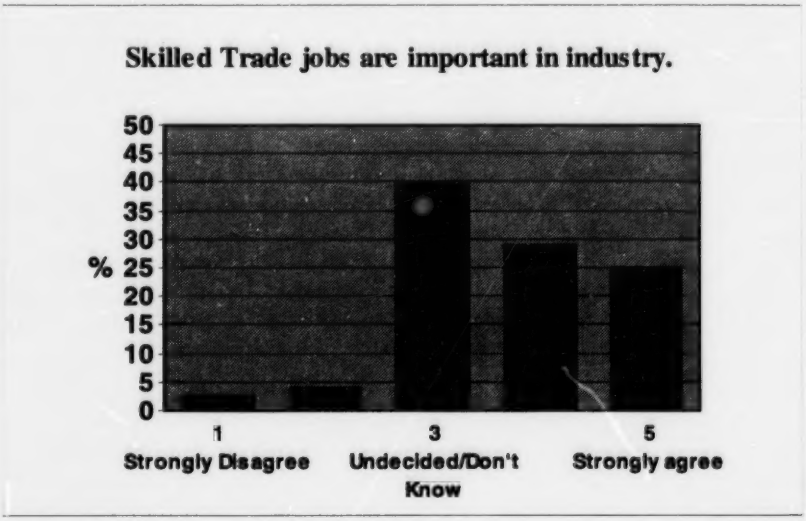
50.0 % of the students surveyed either agreed or strongly agreed to the statement "Skilled Trade jobs are interesting and challenging."

41% of the students indicated not knowing whether Skilled Trade jobs were interesting and challenging.

Chart 6

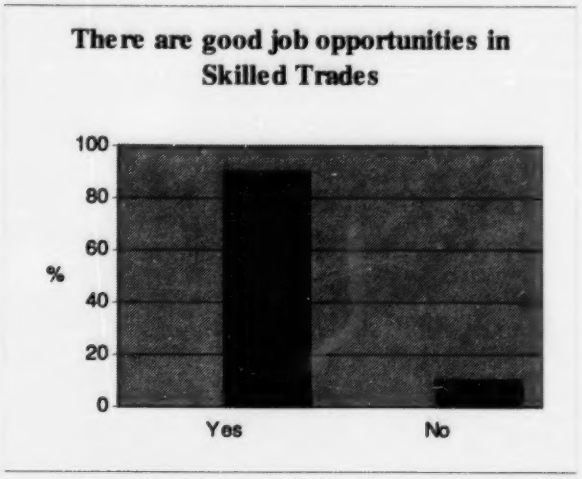
53.8 % of the students surveyed either agreed or strongly agreed to the statement "Skilled Trade jobs are important to industry."

Close to 40% of the students indicated not knowing whether Skilled Trade jobs were important in industry.



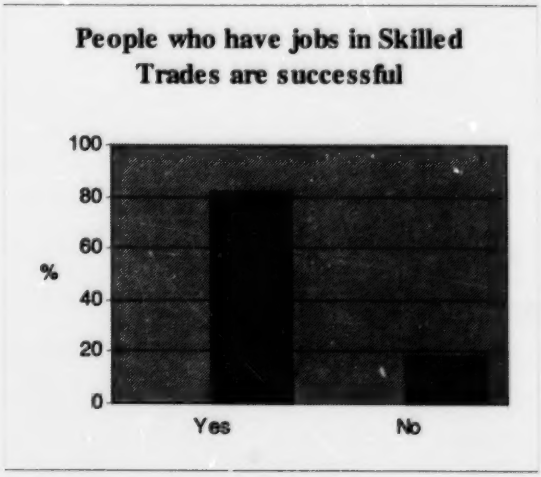
When asked whether there were good opportunities in skilled trades and whether Skilled Trades people were successful, more than 90% of the students indicated yes.

Chart 7



More than 90% felt there were good opportunities in Skilled Trades

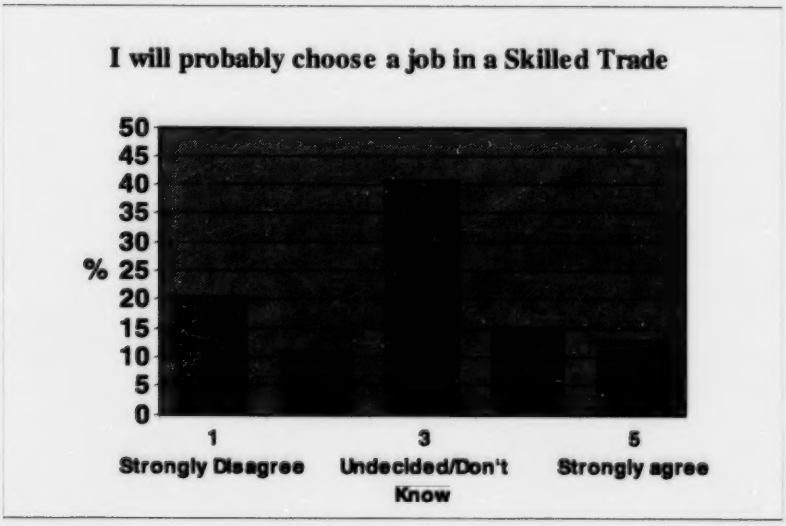
Chart 8



82% felt people who have jobs in Skilled Trades were successful.

Given the perceptions of Skilled Trades jobs being interesting, challenging, abundant and those who have jobs being successful, it is somewhat surprising that when asked about the likelihood of choosing a job in a Skilled Trade, only 28.1% either agreed or strongly agreed.

Chart 9



More than 40% were undecided or didn't know whether they would probably choose a job in a Skilled Trade

More students indicated that they would probably not choose a job in a Skilled Trade than those who indicated they would. When asked to respond to questions / statements concerning "apprenticeship", students appear to lack apprenticeship knowledge. A majority of the students indicated they new what an apprentice was but, when asked if they knew what a journeyperson was, 77.8% indicated 'no'.

Chart 10

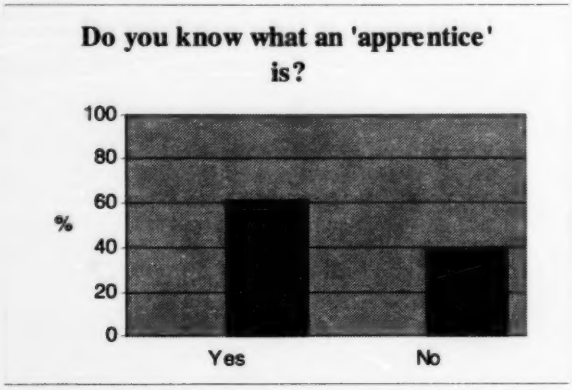


Chart 11

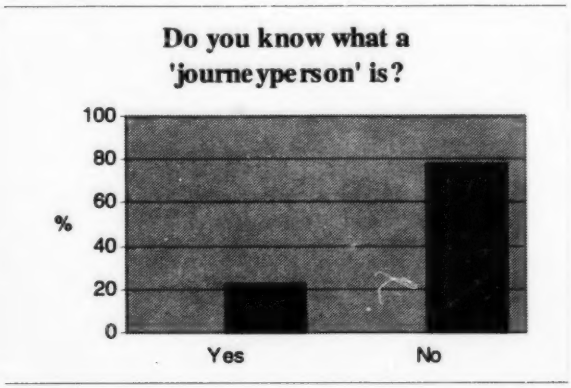
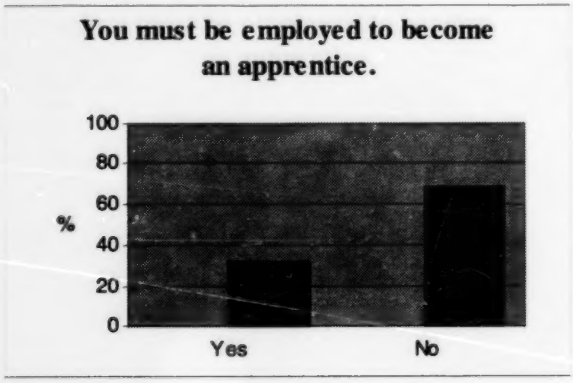
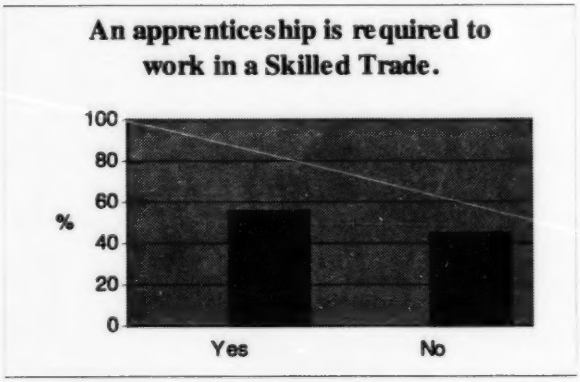


Chart 12



68.3% of the students indicated employment was not a requirement to become an apprentice.

Chart 13

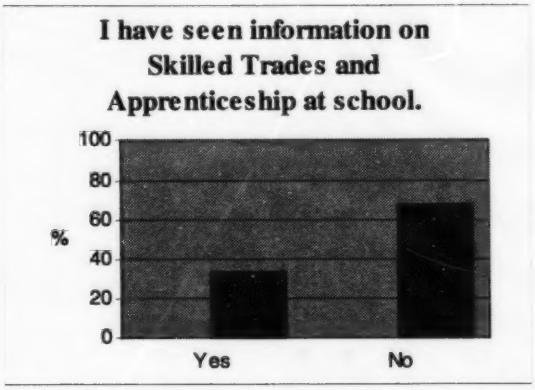


55.5 % of the students indicated an apprenticeship is required to work in a skilled trade.

In three other "apprenticeship" survey questions / statements - 1) Apprentices are paid low wages, 2) Apprenticeship programs are too long, and 3) Apprenticeship programs are expensive, more than two-thirds of the students indicated 'undecided / don't know'.

With an apparent lack of apprenticeship and trades knowledge, it's not much of a stretch to presume that students may not be provided with or exposed to a significant amount of apprenticeship material at school. In fact, when asked about availability of trades and apprenticeship information and whether they have seen any such information, a good majority of students indicated they didn't know and haven't seen any.

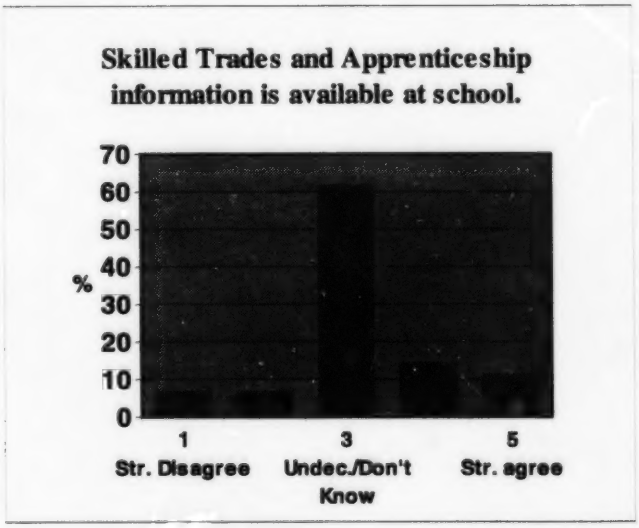
Chart 14



67% of the students indicated they had not seen information on Skilled Trades and Apprenticeship at school.

Chart 15

25.5% of the students agreed that Skilled Trades and Apprenticeship information was available at school. 61.6% indicated they didn't know.

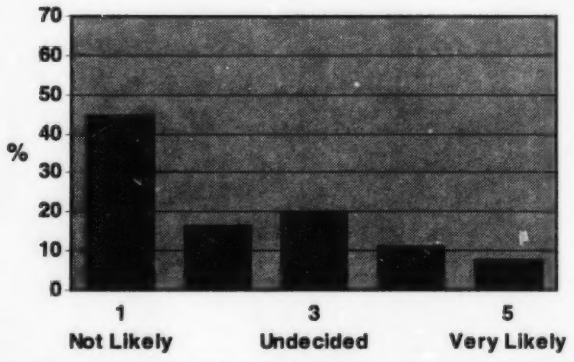


Students' choices and factors influencing post-secondary decisions

In the 20 job categories provided to students, more than half of the students indicated it was 'not likely' that they would work in Agriculture and Forestry / Paper Products. The next 'not likely' category was Trades and Construction.

Chart 16

How likely is it that you will work in the Trades and Construction area when your education is complete?



44.8 % of students indicated that it was 'not likely' that they would work in Trades and Construction following completion of their education. 18.9% indicated it was likely to very likely.

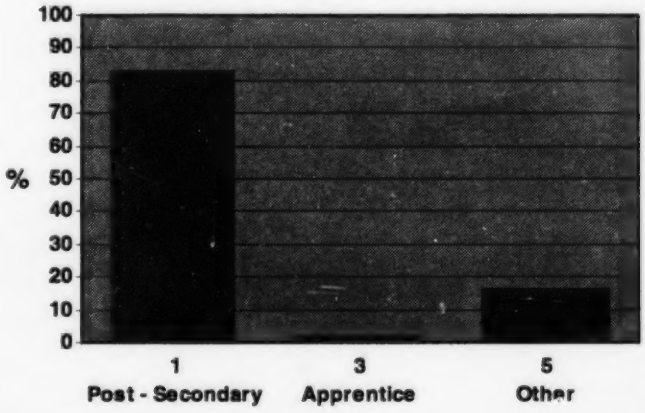
The 'likelihood' of working in Entertainment was the greatest, followed by Business Services, Education, Public / Community Services and Personal Services.

Chart 17

Students' perceptions on what they felt their parents wanted to see them do when leaving high school were not surprising, they were alarming.

68.3% of the students felt their parents wanted them to go to University, 12.6% to Community College, 1.7 to Business School and 1.5% to become an Apprentice / Tradesperson.

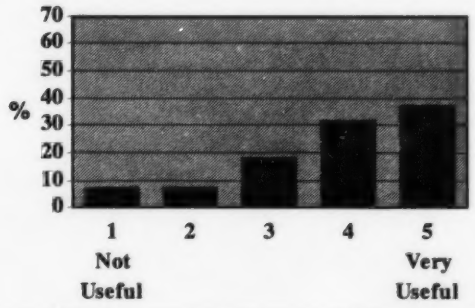
What do you think your parents would most like to see you do when you leave high school?



Of the 10 sources listed (***Table 9***), students rated Teachers / Guidance Counsellors and Family useful to very useful more than any other source when considering what to do when leaving high school. Internet and University / College Calendars were rated the 3rd and 4th.

Chart 18

How helpful do you find Teachers and Guidance Counsellors in deciding what to do when you leave high school?

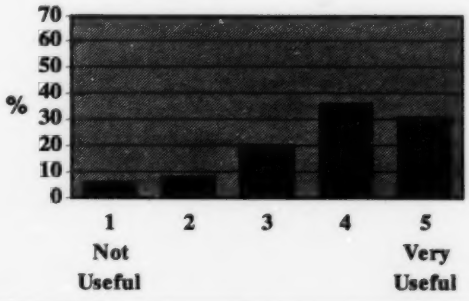


68.4% of students surveyed consider information / advice from Teachers and Guidance Counsellors useful to very useful.

Chart 19

67.7% of students surveyed consider information / advice from Family Members to be useful to very useful.

How helpful do you find Family Members in deciding what to do when you leave high school?

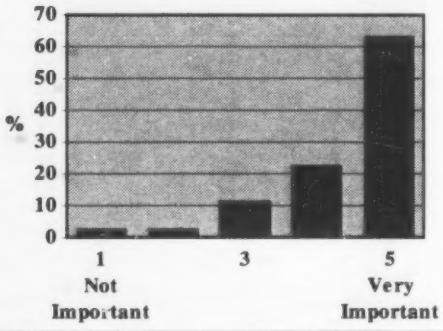


Consistent with Teachers / Guidance Counsellors and Family Members considered useful for information and advice, students indicated learning "anything about apprenticeship" more from 'Family' and 'Class Discussions' than all other sources.

When asked about the importance of issues when considering what to do after high school, students indicated 'Personal Likes and Interests' as the most important. 'Potential Income / Earnings', 'Secure Future' were rated second and third.

Chart 20

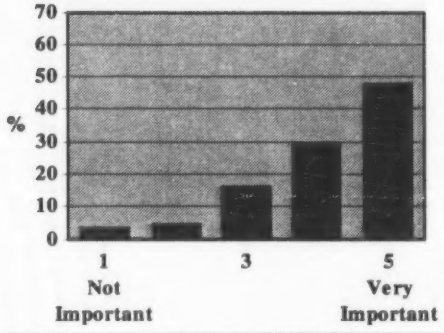
When considering what you will do after leaving high school, how important are personal likes and interests?



62.4% of the students surveyed indicated 'personal likes and interests' as very important when considering what to do after leaving high school.

Chart 21

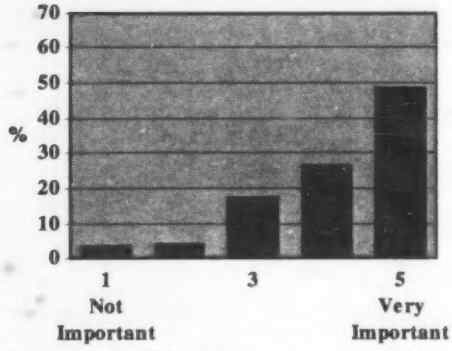
When considering what you will do after leaving high school, how important is potential future income / earnings?



47.5% of the students surveyed indicated 'potential future income / earnings' as very important when considering what to do after leaving high school.

Chart 22

When considering what you will do after leaving high school, how important is a secure future?



48.3% of the students surveyed indicated 'secure future' as very important when considering what to do after leaving high school.

Conclusion

We now have a better understanding of some of the factors influencing post-secondary decisions and some indication of the extent of skilled trade and apprenticeship knowledge of 'youth' in Nova Scotia. We have been given an indication that high school students:

consider themselves strongest in the subjects English and Communication and weakest in Mechanical Skill;

know much more about jobs in the Entertainment field than jobs in Trades and Construction;

have some awareness of Skilled Trades opportunities and tend to have positive perceptions of Skilled Trades but, appear to have limited knowledge of Apprenticeship and the relationship between Apprenticeship and Skilled Trades;

believe they are more likely, once their education is complete, to work in the fields of Entertainment, Education and Personal / Public and Business Services than in the fields of Agriculture, Energy, Forestry, Manufacturing Processing, Pharmaceuticals, Telecommunications and Trades and Construction;

find the advice of Teachers and Guidance Counsellors and family more useful than any other information source in helping decide what they want to do when they leave school;

consider 'personal likes / dislikes' and 'secure future' as the most important issues when considering what they are to do after leaving high school. 'Decisions of friends' and 'Teacher's / Guidance Counsellor's opinion' were considered the least important issues;

believe their parents would like to see them go to University or Community College after leaving high school. Very few thought their parents would like to see them become an apprentice / tradesperson;

have learned about apprenticeship more from family and class discussions than any other source.

From the outset, it was not the intent of this initiative to provide data comparisons of schools and School Boards. This remains the case, although, individual schools or Boards can request a summary of their data results.

Sex, grade level and a multitude of other comparisons are possible but were not within the initial scope of this report. To provide some insight into whether difference in responses occurred between males and females and among grade levels, a cursory review of the cross-tabulations was performed. What the data revealed (in general):

females tend to know less about jobs in trades and construction than males, appear to possess less skilled trades and apprenticeship knowledge than their male counterparts, are less likely to work in trades and construction and are more likely to attend University than become an apprentice / tradesperson;

grade 12 students were more decisive in their responses to skilled trades and apprenticeship questions / statements than grade 10 and 11 students.

Given the 'clearer' picture presented in this report, the challenge to identify and proceed with actions / initiatives / projects, whatever the terminology, for the purpose of increasing high school student trades and apprenticeship awareness remains. The results presented in this report will hopefully kick-start this process.

Bibliography

1) Atlantic Provinces Economic Council and the Construction Association of Nova Scotia. June, 1999. *Economic Trends in the Nova Scotia Construction Sector*. Executive Summary, page 2.
2) March 6, 2000. *A building problem for business*. Globe and Mail. Section E, an advertising supplement.
3) *1999-2001 Management Issues Survey*. Alliance of Manufacturer's and Exporters of Canada.
4) Walsh, John. 1991. *Tell me, what are you going to do when you leave school?* University of Guelph. Guelph, Ontario.
5) Bornais, Stephen. October 8, 2000. *Shortage of Skills*. The Sunday Daily News. Halifax.
6) June, 2000. *Board Meeting Minutes*, Provincial Apprenticeship Board. Halifax.

ATTACHMENTS

Youth Decision Survey

School: _____

Grade: ___10 ___11 ___12

Sex: ___Male ___Female

Age: _____

Have you taken the course 'Career and Life Management'? ___Yes ___No

1) How strong are you in each of the following areas? Score yourself as you think you really are compared with all other people your own age.

1 = Not Very Strong
5 = Very Strong

	1	2	3	4	5
Mathematics	O	O	O	O	O
Science	O	O	O	O	O
English	O	O	O	O	O
Communication	O	O	O	O	O
Technology	O	O	O	O	O
Business	O	O	O	O	O
Art/Music	O	O	O	O	O
Social Science	O	O	O	O	O
Computer Studies	O	O	O	O	O
Mechanical Skill	O	O	O	O	O

2) How much do you know about jobs in each of the following areas?

1 = Very Little
5 = A Great Deal

	1	2	3	4	5
•Agriculture (eg. farming, ranching, working with plants or animals, inspecting, marketing)	O	O	O	O	O
•Business Services (eg. financial services, information services, administration, distribution)	O	O	O	O	O
•Education (eg. teaching, employee, job, and personal development)	O	O	O	O	O
•Energy (eg. alternative energy, hydro-electricity, nuclear energy)	O	O	O	O	O

	1	2	3	4	5
•Entertainment (eg. art & design, dance, radio, film/television/music/theatre/writing)	O	O	O	O	O
•Environment (eg. impact assessment, policy and protection, research & development)	O	O	O	O	O
•Fine arts and crafts (eg. art & design, wood/ metal/fabric production/clay production)	O	O	O	O	O
•Forestry and paper products (eg. logging, saw mills, pulp & paper, manufacturing)	O	O	O	O	O
•Health (eg. acute, long-term and preventative care, alternative care, biotechnology, research)	O	O	O	O	O
•Information technology (eg. developing computers/networks, software, programming)	O	O	O	O	O
•Logistics (eg. inventory management, traffic & transportation, warehouse & distribution)	O	O	O	O	O
•Manufacturing and processing (eg. chemicals, food & beverage production, metals/materials)	O	O	O	O	O
•Personal Services (eg. child care, home-based business, cleaning, image & well-being)	O	O	O	O	O
•Pharmaceuticals (eg. production, distribution, research & development, sales & marketing)	O	O	O	O	O
•Public/community serices (eg. culture & recreation, protection & safety)	O	O	O	O	O
•Retail services (eg. department store, specialty operations, grocery, independent business)	O	O	O	O	O
•Telecommunications (eg. service providers, user organizations, manufacturing)	O	O	O	O	O
•Tourism (eg. transportation, food & beverage, attractions, accommodations, events/conferences)	O	O	O	O	O
•Trades and construction (eg. mechanical/electronic maintenance, site preparation)	O	O	O	O	O
•Transporation (eg. air, marine, railroad, road, space transport)	O	O	O	O	O

3) Please respond to each of the following by answering either YES or NO.

	YES	NO
Do you know what an 'apprentice' is?	O	O
Do you know what a 'journeyperson' is?	O	O
Do you have a part-time job?	O	O
Have you had a summer job?	O	O
Do you know what job you want when you leave school?	O	O

	YES	NO
Most adults in my family have been to University.	O	O
Do you have close family members in Skilled Trades?	O	O
I rely on family members for advice on my education/career.	O	O
I rely on teachers/counsellors for advice on my education/career.	O	O
I rely on my friends for advice on my education/career.	O	O
I generally make my own decisions on my education/career.	O	O
I know people who are apprentices.	O	O
People who have jobs in Skilled Trades are successful.	O	O
You have to go to University to get a good job.	O	O
Grade 12 is required to become an apprentice.	O	O
You must be employed to become an apprentice.	O	O
An apprenticeship is required to work in a Skilled Trade.	O	O
Attending College is required to work in a Skilled Trade.	O	O
There are good job opportunities in Skilled Trades.	O	O
I expect to do the same kind of work as my friends.	O	O
Females are encouraged to pursue careers in Skilled Trades.	O	O
I have seen information on Skilled Trades & Apprenticeship at school.	O	O

4) How much do you agree or disagree with each of the following statements?

1 = Strongly Disagree
3 = Undecided/Don't Know
5 = Strongly Agree

	1	2	3	4	5
Apprentices are paid low wages.	O	O	O	O	O
An apprenticeship is too difficult for me.	O	O	O	O	O
Apprenticeship programs are too long.	O	O	O	O	O
Apprenticeship programs are expensive.	O	O	O	O	O
I will probably choose a job in a Skilled Trade.	O	O	O	O	O
Skilled Trade jobs are well paid.	O	O	O	O	O
Skilled Trade jobs are dirty.	O	O	O	O	O
Skilled Trade jobs are interesting & challenging.	O	O	O	O	O
People would think it unusual if I became an apprentice.	O	O	O	O	O
New technology makes Skilled Trades less important.	O	O	O	O	O
People employed in Skilled Trades are satisfied with their jobs.	O	O	O	O	O
Skilled Trades people are often unemployed.	O	O	O	O	O
An office job is better than a Skilled Trade job.	O	O	O	O	O
Skilled Trades people often start their own businesses.	O	O	O	O	O
Skilled Trade jobs are important in industry.	O	O	O	O	O
Women are capable of working in Skilled Trades.	O	O	O	O	O
I know what I need to study to become an apprentice.	O	O	O	O	O

	1	2	3	4	5
There is a big demand for Skilled Trades people.	O	O	O	O	O
I have thought about becoming an apprentice.	O	O	O	O	O
Apprenticeship is not for me.	O	O	O	O	O
I do not know much about Apprenticeship Programs.	O	O	O	O	O
People in Skilled Trade jobs rarely get promoted.	O	O	O	O	O
I believe good students do not go into Skilled Trades.	O	O	O	O	O
Apprenticeship is an option for less academically inclined students.	O	O	O	O	O
Skilled trades & apprenticeship information is available at school.	O	O	O	O	O

5) Consider your own abilities and interests. How likely is it that you will work in the following areas when your education is complete.

1 = Not Likely
3 = Undecided
5 = Very Likely

	1	2	3	4	5
•Agriculture	O	O	O	O	O
•Business Services	O	O	O	O	O
•Education	O	O	O	O	O
•Energy	O	O	O	O	O
•Entertainment	O	O	O	O	O
•Environment	O	O	O	O	O
•Fine arts and crafts	O	O	O	O	O
•Forestry and paper products	O	O	O	O	O
•Health	O	O	O	O	O
•Information Technology	O	O	O	O	O
•Manufacturing and Processing	O	O	O	O	O
•Personal Services	O	O	O	O	O
•Pharmaceuticals	O	O	O	O	O
•Public/community services	O	O	O	O	O
•Retail services	O	O	O	O	O
•Telecommunications	O	O	O	O	O
•Tourism	O	O	O	O	O
•Trades and construction	O	O	O	O	O
•Transportation	O	O	O	O	O

6) In helping you decide what to do when you leave high school, what sources of information and advice do you find to be the most useful?

1 = Not Useful
5 = Very Useful

	1	2	3	4	5
University/College Calendars	O	O	O	O	O
Friends	O	O	O	O	O
TV, Radio & Magazines	O	O	O	O	O
Internet	O	O	O	O	O
Family Members	O	O	O	O	O
Teachers and Guidance Counsellors	O	O	O	O	O
Career Fairs	O	O	O	O	O
Brochures/Posters	O	O	O	O	O
Employer	O	O	O	O	O
Other	O	O	O	O	O
	O	O	O	O	O

7) When considering what you will do after leaving high school how important are the following issues?

1 = Not Important
5 = Very Important

	1	2	3	4	5
Immediate Income/Earnings	O	O	O	O	O
Potential Future Income/Earnings	O	O	O	O	O
Location (ie. stay home vs. move away)	O	O	O	O	O
Decisions of Friends	O	O	O	O	O
Advice/Opinions of Friends	O	O	O	O	O
Advice/Opinions of Family	O	O	O	O	O
Teacher's/Guidance Counsellor's opinion	O	O	O	O	O
Length of commitment (ie. 2 vs. 4 year program)	O	O	O	O	O
Natural skills/aptitudes	O	O	O	O	O
Secure Future	O	O	O	O	O
Challenging Work	O	O	O	O	O
Personal likes & interests	O	O	O	O	O
Predictions of Future Job Market Conditions	O	O	O	O	O

8) What do you think your parents would most like to see you do when you leave high school?

- O Go to University
- O Go to Community College
- O Go to Business College
- O Become an apprentice(tradesperson)
- O Get a job
- O Other _____
- O Not sure

9) Have you learned anything about apprenticeship through the following sources?

	YES	NO
A Booth at Career Fairs	O	O
Program Calendar	O	O
Internet	O	O
Brochures/Posters	O	O
Newsletters	O	O
Class discussions/presentations	O	O
Family	O	O
Friends	O	O
TV/Radio & Magazines	O	O
Employer	O	O
Other	O	O